6BQ7A

Medium-Mu Twin Triode

9-PIN MINIATURE TYPE

For TV Tuners Using Direct-Coupled Cathode-Drive Circuits

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current	0.4	amp

Direct Interelectrode Capacitances:[a] ←

	Unit No.1	*Unit No.2*	
Grid to plate	1.2	1.2	μμf
Grid to cathode, internal shield, and heater	2.6	–	μμf
Cathode to grid, internal shield, and heater	–	5	μμf
Plate to cathode, internal shield, and heater	1.2	–	μμf
Plate to grid, internal shield, and heater	–	2.2	μμf
Plate to cathode	0.12	0.12	μμf
Heater to cathode	2.6	2.6	μμf
Plate of unit No.1 to plate of unit No.2	0.010 max.		μμf
Plate of unit No.2 to plate and grid of unit No.1	0.024 max.		μμf

Characteristics, Class A_1 Amplifier (Each Unit): ←

Plate Supply Voltage	150	volts
Cathode Resistor	220	ohms
Amplification Factor	38	
Plate Resistance (Approx.)	5900	ohms
Transconductance	6400	μmhos
Plate Current	9	ma
Grid Voltage (Approx.) for plate μa = 100	-6.5	volts

Mechanical:

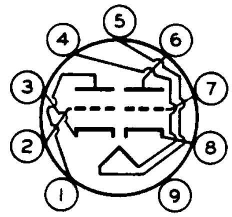
Operating Position	Any
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See *General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)

← Indicates a change.

6BQ7A

Basing Designation for BOTTOM VIEW. 9AJ

Pin 1 - Plate of Unit No.2
Pin 2 - Grid of Unit No.2
Pin 3 - Cathode of Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate of Unit No.1
Pin 7 - Grid of Unit No.1
Pin 8 - Cathode of Unit No.1
Pin 9 - Internal Shield

AMPLIFIER — Class A_1

Values are for Each Unit

Maximum Ratings, *Design-Center Values:*

PLATE VOLTAGE	250[b]	max.	volts
PLATE DISSIPATION	2	max.	watts
CATHODE CURRENT	20	max.	ma
→ PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. .	200[b]	max.	volts
Heater positive with respect to cathode. .	200[c]	max.	volts

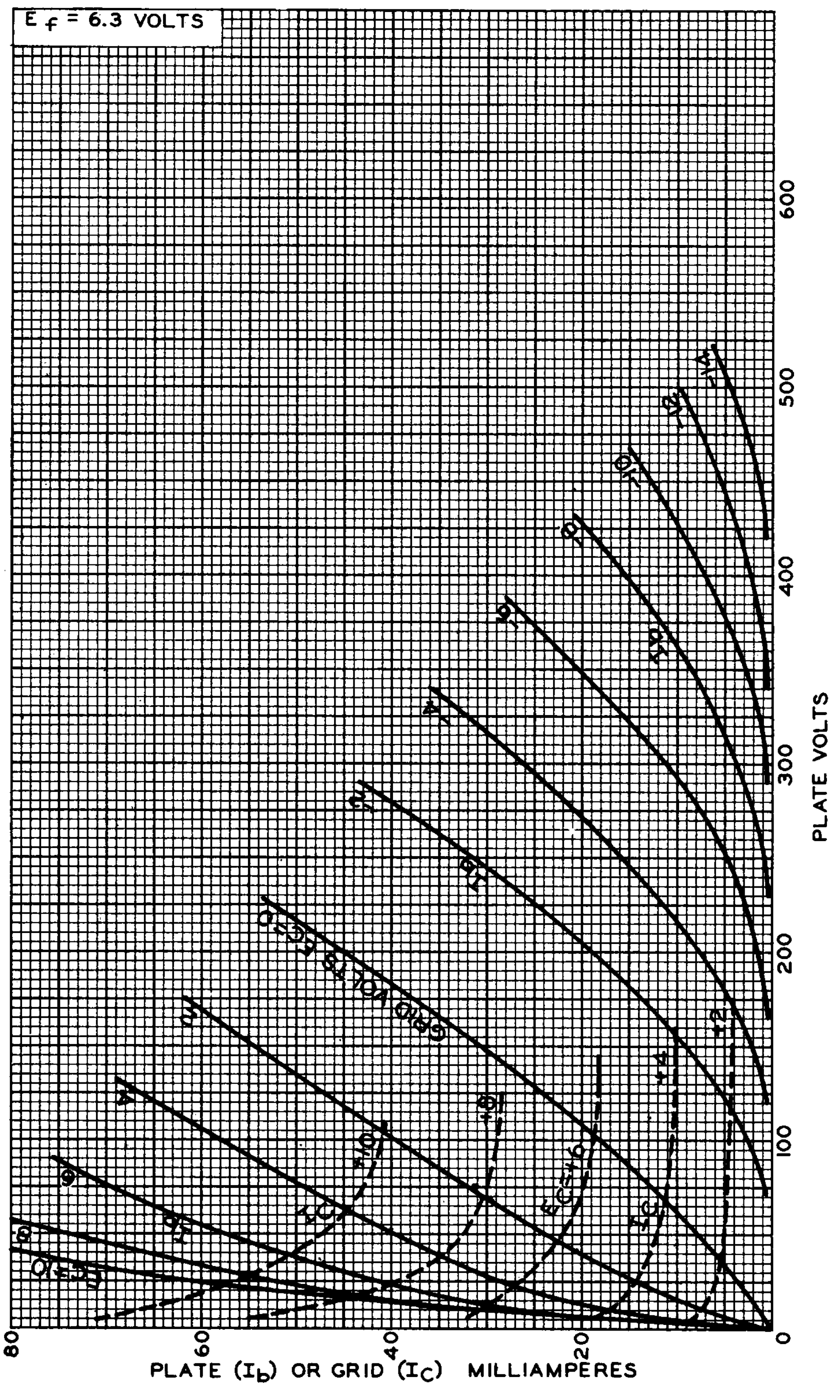
Maximum Circuit Values:

Grid-Circuit Resistance	0.5	max.	megohm

[a] With external shield JEDEC No.315 connected to internal shield.
[b] Under cutoff conditions in direct-coupled cathode-drive circuits, it is permissible for this voltage to be as high as 300 volts.
[c] The dc component must not exceed 100 volts.

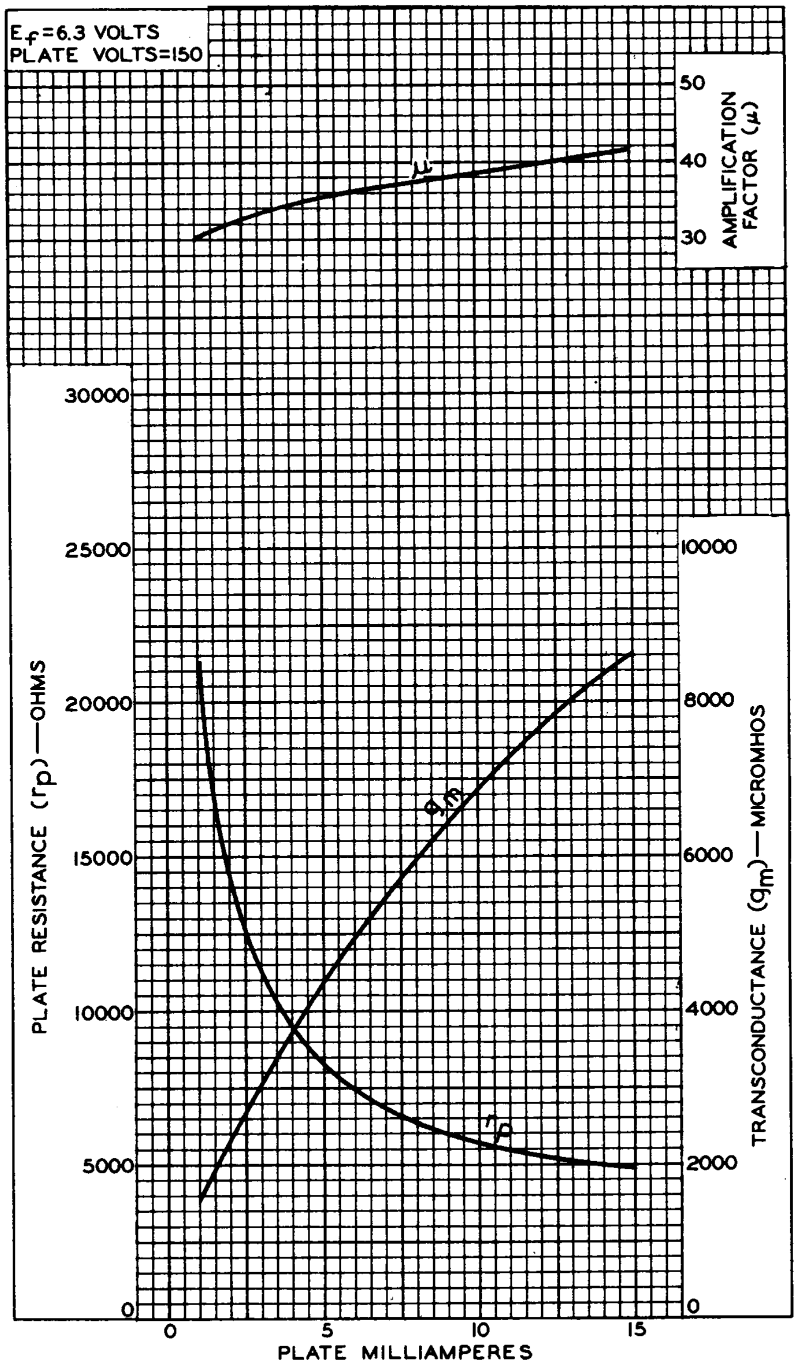
→ Indicates a change.

AVERAGE CHARACTERISTICS
Each Unit



92CM-7536R1

AVERAGE CHARACTERISTICS
Each Unit



92CM-7538R2